

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method of treatment for treating, preventing, inhibiting or reducing a biological or immunological response to a reactive chemical agent, biological agent or toxin, by tissue of a subject, comprising administering to a subject ~~in need of such treatment~~ an effective amount of a composition comprising a response-inhibiting peptide agent comprising amino acid sequence LKKTET [SEQ ID NO: 1], or a conservative variant thereof, Thymosin β 4 (T β 4), a T β 4 isoform, analogue or derivative, KLKKTET, LKKTETQ, oxidized T β 4, T β 4 sulfoxide, an N-terminal variant of T β 4, a C-terminal variant of T β 4, T β 4^{ala}, T β 9, T β 10, T β 11, T β 12, T β 13, T β 14, T β 15, gelsolin, vitamin D binding protein (DBP), profilin, cofilin, depactin, Dnasel, villin, fragmin, severin, capping protein, β -actinin, or acumentin, or ~~an~~ a stimulating agent that stimulates production of an LKKTET [SEQ ID NO: 1] peptide, or a conservative variant thereof, said peptide agent in said tissue, so as to inhibit said response.
2. (Currently Amended) The method of claim 1 wherein said biological or immunological response comprises redness, induration, swelling, itching, rash, blisters, inflammation, ~~arythema~~ erythema or a combination thereof.
3. (Original) The method of claim 1 wherein said response-inhibiting agent has an ability to down-regulate inflammatory cytokines, chemokines or a combination thereof, so as to result in biological or immunological response-inhibition in said tissue.
4. (Currently Amended) The method of claim 1 wherein said response-inhibiting agent is thymosin Thymosin beta 4 (T β 4).
5. (Original) The method of claim 1 wherein said response-inhibiting agent is other than T β 4.

6. (Previously Presented) The method of claim 1 wherein said agent comprises amino acid sequence KLKKTET [SEQ ID NO: 2], amino acid sequence LKKTETQ [SEQ ID NO: 3], and N-terminal variant of T β 4, a C-terminal variant of T β 4, an isoform of T β 4, oxidized T β 4 or T β 4 sulfoxide.
7. (Original) The method of claim 1 wherein said response-inhibiting agent directly and indirectly inhibits said response.
8. (Currently Amended) The method of claim 7 1 wherein said response-inhibiting agent indirectly inhibits said response, and said response-inhibiting agent stimulates production of an LKKTET [SEQ ID NO: 1] peptide in tissue of said subject.
9. (Original) The method of claim 1 wherein said response-inhibiting agent is administered to said subject at a dosage within a range of about 1-25 micrograms.
10. (Original) The method of claim 1 wherein said response-inhibiting agent is administered by direct injection into said tissue, or by intravenous, intraperitoneal, intramuscular, subcutaneous, inhalation, transdermal or oral administration, to said subject.
11. (Original) The method of claim 1 wherein said composition is administered systemically.
12. (Original) The method of claim 1 wherein said composition is administered topically.
13. (Currently Amended) The method of claim 12 wherein said composition is in the form of a gel, creme, paste, lotion, spray, suspension, dispersion, salve, hydrogel or ointment formulation, or wherein said peptide agent is present in water.
14. (Original) The method of claim 1 wherein said agent is a recombinant or synthetic peptide.
15. (Original) The method of claim 1 wherein said agent is an antibody.

16. (Original) The method of claim 7 wherein said antibody is polyclonal or monoclonal.

17. (Currently Amended) A-~~The method of claim 1 treatment for treating, preventing, inhibiting or reducing a biological or immunological response to a reactive chemical agent, biological agent or toxin, by tissue of a subject, comprising administering to a said subject ~~in need of such treatment~~ an effective amount of a said composition comprising a said stimulating agent that stimulates production of a biological or immunological response-inhibiting polypeptide comprising said peptide agent amino acid sequence LKKTET [SEQ ID NO: 1], or a conservative variant thereof, having biological or immunological response-inhibiting activity.~~

18. (Original) The method of claim 17 wherein said polypeptide is Thymosin beta 4.

19. (Currently Amended) The method of claim 17 wherein said stimulating agent is an agonist ~~antagonist~~ of Thymosin beta 4.

20. (Original) The method of claim 1, wherein said tissue is a surface tissue selected from skin or a mucous membrane of said subject, pulmonary tissue of said subject or gastrointestinal tissue of said subject.

21. (Original) The method of claim 17, wherein said tissue comprises a surface tissue selected from skin or a mucous membrane of said subject, pulmonary tissue of said subject or gastrointestinal tissue of said subject.

22. (Original) A method of screening for a biological or immunological response-inhibiting agent, comprising contacting tissue exhibiting a biological or immunological response, with a candidate compound; and measuring a level of reduction of the biological or immunological response in said tissue, wherein a reduction of said level compared to a level in a corresponding tissue lacking said candidate compound indicates that said candidate compound is capable of treating, preventing, inhibiting or reducing said biological or immunological response.

23. (Original) A method of screening for a biological or immunological response-inhibiting agent, comprising contacting tissue with a candidate compound; contacting the tissue with a substance which induces a biological or immunological response in said tissue in the absence of said candidate compound; and measuring a level of reduction of the biological or immunological response in said tissue, wherein a reduction of said level compared to a level in a corresponding tissue lacking said candidate compound indicates that said compound is capable of treating, preventing, inhibiting or reducing the biological or immunological response.

24. (Original) A method for screening for a stimulating agent capable of stimulating production in a tissue of a biological or immunological response-inhibiting agent, comprising contacting a tissue exhibiting a biological or immunological response, with a candidate compound; and measuring activity in said tissue of a biological or immunological response-inhibiting agent, wherein an increase of activity of said response-inhibiting agent in said tissue, compared to a level of activity of said response-inhibiting agent in a corresponding tissue lacking said candidate compound, indicates that said compound is capable of inducing said stimulating agent.

25. (Previously Presented) The method of claim 24 wherein said response-inhibiting agent is an LKKTET [SEQ ID NO: 1] peptide.

26. (Currently Amended) The method of claim 25 wherein said LKKTET [SEQ ID NO: 1] peptide is ~~thymosin~~-Thymosin beta 4.

27. (Original) A method of screening for a stimulating agent capable of stimulating production of a biological or immunological response-inhibiting agent in a tissue, comprising contacting a tissue with a candidate compound, contacting the tissue with a substance that induces a biological or immunological response in said tissue in the absence of said candidate compound; and measuring activity in said tissue of said response-inhibiting agent, wherein an increase of activity in said tissue of said response-inhibiting agent, compared to a level of said activity in a corresponding tissue lacking said candidate compound, indicates that said candidate compound is capable of stimulating production in said tissue of said response-inhibiting agent.

28. (Previously Presented) The method of claim 27 wherein said response-inhibiting agent is an LKKTET [SEQ ID NO: 1] peptide.

29. (Currently Amended) The method of claim 28 wherein said LKKTET [SEQ ID NO: 1] peptide is ~~thymosin~~ Thymosin beta 4.